AMENDMENTS TO THE CLAIMS

Cancel, without prejudice or disclaimer, claims 2 and 8. Amend claims 1, 7, 29 and 34 as shown below:

1. (Currently amended) A method of making a semiconductor comprising depositing a group II-group VI compound onto a substrate in the presence of nitrogen in a gaseous form using sputtering to produce a nitrogen-doped p-type semiconductor.

2. (Cancelled) The method of claim 1 in which the nitrogen is in a gaseous form during the sputtering.

3. (Original) The method of claim 1 in which the group II-group VI compound is one or more compounds of the group zinc telluride, zinc selenide, zinc sulfide, mercury selenide, mercury telluride, mercury sulfide, cadmium sulfide, cadmium telluride, cadmium selenide, magnesium telluride, and magnesium selenide.

4. (Original) The method of claim 1 in which the sputtering is RF sputtering.

5. (Original) The method of claim 1 in which the sputtering is reactive sputtering.

6. (Original) The method of claim 1 in which sputtering step creates a layer of the doped group II-group VI compound that is larger than about 4 cm^2.

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7. (Currently amended) A method of making a photovoltaic cell comprising using sputtering to apply a p-type back contact layer of group II-group VI compound to a substrate in the presence of nitrogen in a gaseous form, the back coating layer being doped with nitrogen.

8. (Cancelled) The method of claim 7 in which the nitrogen is in a gaseous form during the sputtering.

9. (Original) The method of claim 7 in which the group II-group VI compound is one or more compounds of the group zinc telluride, zinc selenide, zinc sulfide, mercury selenide, mercury telluride, mercury sulfide, cadmium sulfide, cadmium telluride, cadmium selenide, magnesium telluride, and magnesium selenide.

10. (Original) The method of claim 7 in which the sputtering is RF sputtering.

11. (Original) The method of claim 7 in which the sputtering is reactive sputtering.

12. (Original) The method of claim 7 in which sputtering step creates a layer of the doped group II-group VI compound that is larger than about 4 cm^2.

13-28. (Cancelled)

29. (Currently amended) A method of making a semiconductor comprising depositing a group II-group VI compound onto a substrate using sputtering to produce a nitrogen-doped p-type semiconductor, wherein the

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sputtering is carried out in an atmosphere containing an amount of nitrogen in a gaseous form within the range of from about 0.5 percent to about 3 percent.

30. (Previously presented) The method of claim 29 in which the remainder of the atmosphere is argon gas.

31. (Previously presented) The method of claim 29 in which the group II-group VI compound is one or more compounds of the group zinc telluride, zinc selenide, zinc sulfide, mercury selenide, mercury telluride, mercury sulfide, cadmium sulfide, cadmium telluride, cadmium selenide, magnesium telluride, and magnesium selenide.

32. (Previously presented) The method of claim 29 in which the group II-group VI compound is zinc telluride.

33. (Canceled).

34. (Currently amended) A method of making a photovoltaic cell comprising using sputtering to apply a back contact p-type layer of group II-group VI compound to a substrate in the presence of nitrogen, the back coating layer being doped with nitrogen, wherein the sputtering is carried out in an atmosphere containing an amount of nitrogen in a gaseous form within the range of from about 0.5 percent to about 3 percent.

35. (Previously presented) The method of claim 34 in which the remainder of the atmosphere is argon gas.

36. (Previously presented) The method of claim 35 in which the group II-group VI compound is one or more compounds of the group zinc

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telluride, zinc selenide, zinc sulfide, mercury selenide, mercury telluride, mercury sulfide, cadmium sulfide, cadmium telluride, cadmium selenide, magnesium telluride, and magnesium selenide.

37. (Previously presented) The method of claim 34 in which the group II-group VI compound is zinc telluride.

38. (Cancelled)

39. (Previously presented) The method of claim 34 in which the sputtering is reactive sputtering.

40. (Previously presented) The method of claim 1 in which the group II-group VI compound is zinc telluride.

41. (Previously presented) The method of claim 7 in which the group II-group VI compound is zinc telluride.

42. (Cancelled)

43. (Cancelled)

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